

# **Quality Care Program (QCP): Integrated Software for Preventive Health Care, Quality Improvement, and Risk Management**

E. Chris Vincent, M.D.<sup>1</sup>, Philip A. Hardin, Ph.D.<sup>2</sup>, Lee A. Norman, M.D., M.B.A., M.H.S.<sup>1</sup>,  
Elizabeth A. Lester, B.A.<sup>2</sup>, and Scott H. Stinton, B.A.<sup>1</sup>

<sup>1</sup>Swedish Family Medicine, Swedish Hospital, Seattle, WA and

<sup>2</sup>CYBIS Medical Systems, Bellevue, WA

A cohesive, generally-accepted method for preventive health care, quality improvement, and risk management has not yet been used in ambulatory practices. Soon it is expected that clinics will be required to demonstrate their efforts to enhance and sustain health care quality. Accrediting bodies, the federal government, malpractice insurance carriers, and health insurance companies are becoming more involved in preventive health care, quality improvement, and risk management activities. What is more important however is that physicians and nurses want to do what is right for their patients.

The Quality Care Program (QCP) is a computerized tool designed to assist and facilitate better patient care.[1,2] It was created with three broad goals in mind: (1) to serve as a method for improving preventive care in ambulatory clinics, (2) to perform defined tasks that increase patient care quality, and (3) to help physicians reduce their malpractice risk. To be practical and effective, the means to these goals had to be comprehensive and concise; yet the software had to be completely modifiable, as well as fast and easy to use. Four concepts formed the basis for the program design:

- ◆ To practice preventive care using health maintenance recommendations based upon each patient's personal and family medical histories.
- ◆ To track test results to insure follow-up and provide consistent attention to each patient's health care.
- ◆ To involve the patient in his or her health care by sending letters about test results and reminders for recommended tests, procedures, and visits.
- ◆ To monitor the outcomes of all patient visits to assist clinics and physicians with quality improvement measures.

QCP encompasses these requirements and performs them with minimal physician interaction. The software contains standardized but modifiable health maintenance recommendations, tracks test results, generates patient correspondence, and helps monitor the quality of patient care.

At each patient visit individualized health maintenance recommendations, outstanding test results, and health risk factors are retrieved, summarized, and printed in an easy-to-read one page format which is attached to the patient's chart. There is no need to wade through the chart to check information, saving physician time. "Lost" test results can be reconciled. Visits that have unsatisfactory outcomes can be compiled and reviewed periodically to determine possible problem areas without performing chart audits. The most time consuming activity for the physician occurs when the patient is first brought onto the system. The provider must then spend approximately 90 seconds filling out a health risk factor questionnaire. On subsequent patient visits the provider spends a few seconds reviewing and updating the patient's health status on an encounter worksheet.

QCP also produces reports that will help physicians and clinics alike to monitor the quality of care. These reports show which patients have tests or procedures that are "overdue," have needs that must be made more specific by the physician, or have had visits with adverse outcomes. Statistics on physician and patient compliance with health maintenance recommendations are generated. A summary of available reports, physician worksheets, and results of a two year experience using the system in an 18 resident family practice training program will be presented on the posters. Information on resource requirements and direct costs will also be available.

## **References**

- 1 . Norman LA, Hardin PA. A multipurpose computer-assisted program to improve ambulatory medical care: a preliminary report. QRB 1990; 16:364-72.
- 2 . Norman LA, Hardin PA, Lester E, Stinton S, Vincent EC. Computer-assisted quality improvement in an ambulatory care setting: A follow-up report. Joint Comm J Qual Improv. 1995; 21:116-31.